

Notice of Allowability

Application No.

10/767,276

Examiner

Thanhha Pham

Applicant(s)

ANG ET AL.

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/02/2005.
2. ☒ The allowed claim(s) is/are 1, 3-27 and 42.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date ____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark Marcelli on 09/30/2005.

The application has been amended as follows:

- In claim 1,
line 5, after "planar" insert – top –
- In claim 4,
line 4, change "stop" to – stopping –
- In claim 12,
line 4, change "said polishing stop layer" to – said polish stopping layer –
- In claim 42,
line 3, after "planar" insert – top --

Allowable Subject Matter

2. Claims 1, 4-27 and 42 are allowed.
3. The following is an examiner's statement of reasons for allowance: Recorded Prior Art fails to disclose or suggest the combination of the process steps of method to polish down conductive lines in the manufacture of an integrated circuit device as

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recited in the base claim 1 including: depositing a high density plasma (HDP) oxide layer overlying said substrate and said conductive lines wherein, in the regions between said conductive lines, first planar top surfaces of said HDP oxide layer are formed below the top of said conductive lines; and polishing down said film layer, said polish stopping layer, said HDP oxide layer and said conductive lines to portions of said polish stopping layer overlying said first top planar surfaces to complete said polishing down of said conductive lines. Recorded Prior Art also fails to disclose or suggest the combination of the process steps of method to polish down polysilicon lines in the manufacture of an integrated circuit device as recited in the base claim 11 including: depositing a high density plasma (HDP) oxide layer overlying said substrate and said polysilicon lines wherein, in the regions between said polysilicon lines, first planar top surfaces of said HDP oxide layer are formed below the top of said polysilicon lines; and polishing down said film layer, said polish stopping layer, said HDP oxide layer and said polysilicon lines to said polish stopping layer overlying said first top planar surfaces to complete said polishing down of said polysilicon lines. Recorded Prior Art also fails to disclose or suggest the combination of the process steps of method to form anti-fuse memory devices in the manufacture of an integrated circuit device as recited in the base claim 19 including: depositing a high density plasma (HDP) oxide layer overlying said substrate and said n-type polysilicon lines wherein, in the regions between said n-type polysilicon lines, first planar top surfaces of said HDP oxide layer are formed below the top of said n-type polysilicon lines; and polishing down said film layer, said polish stopping layer, said HDP oxide layer and said n-type polysilicon lines to said polish

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stopping layer overlying said first top planar surfaces to complete said polishing down of said n-type polysilicon lines.


4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhha Pham whose telephone number is (571) 272-1696. The examiner can normally be reached on Monday and Thursday 9:00AM - 9:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thanhha Pham


LAURA M. SCHILLINGER
PRIMARY EXAMINER